

REMARKS

This paper is responsive to the Final Office Action issued on June 8, 2010. Claims 10 and 14 are cancelled. Applicant respectfully requests reconsideration of this application.

§112 Rejections

The Examiner rejected claims 10, 11 and 14 as being indefinite under 35 U.S.C. §112, second paragraph. In light of this rejection, Applicant cancels claims 10 and 14. With respect to claim 11, Applicant respectfully submits that the Examiner's indefiniteness rejection is improper. Claim 11 expands on the "moving" step recited in independent claim 1. For example, claim 11 further limits the "moving" step to include forming grooves on the tube. A method claim is not indefinite simply because it includes some structural limitations. Accordingly, claim 11 is not indefinite.

§102 Rejections

Claims 1-2, 6-8, 10 and 20 stand rejected under 35 U.S.C. §102(b) as being anticipated by *Valleins* (U.S. Patent No. 3,494,170). Independent claim 1 and independent claim 20 require that the tube is either moved or axially translated subsequent to releasing the mold from the tube. *Valleins* fails to disclose these claimed features. In contrast, *Valleins* teaches a swaging operation that utilizes a mandrel 3 and press members 2. Column 2, lines 48-72. The press members 2 (i.e., the mold) are never moved relative to the tube 1. Rather, the press members 2 are stationary and the mandrel 3 is the only moveable part of *Valleins*. See Figures 3-4. Accordingly, *Valleins* does not disclose the step of "releasing the mold from the tube" and the claims are not anticipated.

§103 Rejections

Claim 11 is rejected as being obvious under 35 U.S.C. §103(a) over *Valleins* in view of *Zifferer* (U.S. Patent Publication No. 2002/0121361). The Examiner acknowledges that *Valleins*

fails to disclose a plurality of rollers. However, in view of *Zifferer*, the Examiner contends it would have been obvious to modify *Valleins* to include a plurality of rollers instead of dies because they are functionally equivalent. Applicant respectfully disagrees with this rejection.

The rejection of claim 11 requires modifying *Valleins* in a manner that removes an intended feature from that reference. This is not permissible under MPEP 2143.01(V).

Valleins describes the desire to form flutings that extend inwardly into the tube with a swaging operation. The inward projection of the flutings is desired to provide a tube that is devoid of raised portions, thus enabling flat surfaces to be joined together. See column 1, lines 50-55. Modifying *Valleins* to include rollers instead of dies would destroy the main goal of *Valleins* to provide tubes devoid of raised portions. For example, rollers would form raised portions on the tube of *Valleins* similar to those raised portions depicted in Figure 10 of Applicant's disclosure. The proposed modification is improper and the rejection to claim 11 must be withdrawn.

Moreover, there must be a legally sufficient reason to make a modification under 35 U.S.C. §103. When there is no benefit or purpose achieved by a proposed modification, then the required reasoning is missing. In this case, the Examiner proposes to modify a tube swaging operation by replacing dies with rollers. There is no reason to make such a modification because it would provide no benefit and serve no purpose. *Valleins* is concerned with forming square or rectangular cross-sectioned tubes that facilitate the assembly of tubular frameworks in a swaging operation. Column 1, lines 30-35. Moreover, rollers are not adapted for use in a swaging operation. For these reasons, the suggested modification to *Valleins* is improper and should be withdrawn.

Claim 21 is rejected under 35 U.S.C. §103(a) as being obvious over *Valleins* in view of *Steingroever* (U.S. Patent No. 5,964,127). The Examiner acknowledges that *Valleins* does not disclose rotating the tube in addition to axially translating the tube. However, in view of

Steingroever, the Examiner contends it would have been obvious to one having ordinary skill in the art at the time the invention was made to both rotate and translate the tube of *Valleins* to provide structural integrity to *Valleins*' metal frame by having ribs or flutings radially around the metal tube to provide an improved ability to withstand transverse compression from any circumferential force. Applicant respectfully disagrees with the proposed modification of *Valleins*.

The rejection of claim 21 requires modifying *Valleins* in a manner that would both remove an intended feature and change the principal of operation of such reference. Neither result is legally permissible under MPEP 2143.01(V), (VI). First, *Valleins* discloses that flat fluted shaped faces are particularly appropriate for withstanding transverse compression forces and are desired. See column 1, lines 45-55. Modifying the *Valleins* swaging operation to include a rotating movement of the tube would alter the desired shape of the flutings and destroy the main goal of *Valleins* to provide flutings that withstand transverse compression forces. Contrary to the Examiner's assertions, the proposed modification would actually reduce the structural integrity of the *Valleins* metal frame, which requires a square or rectangular cross-section.

Moreover, the proposed modification would change the principle of operation of *Valleins*, which is impermissible under MPEP 2143.01(VI). In order to provide rotation of the square or rectangular cross-section tubes of *Valleins*, the entire configuration of the mandrel 3 and press member 2 of *Valleins* would need redesigned. Indeed, the Examiner does not identify, nor is it evident, how the mandrel 3 and press members 2 could be designed to provide rotation of a square or rectangular shaped tube during the swaging operation. Finally, rotating the tubes of *Valleins* would result in the formation of flutings on the corners of the square and/or rectangular cross-section tubes. Therefore, the tubes would no longer have substantially flat surfaces that enable

adjacent tubes to be joined together as desired by *Valleins*. See column 1, lines 50-55. For each of these reasons, claim 21 is not obvious.

Claims 5, 9 and 12-13 are also rejected as being obvious over *Valleins* in view of *Steingroever*. For all the reasons stated above, such a modification to *Valleins* is improper. Accordingly, these claims are also not obvious.

Applicant respectfully submits that all claims are in condition for allowance.

Respectfully submitted,

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